

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	81	miller.xa. and "73"\$.ccls. and (plug or slug or molten)	US-PGPUB; USPAT	OR	ON	2006/12/30 17:00
L2	39	("2865196"   "3435664"   "3548640"   "3623357"   "3641550"   "3654072"   "3875989"   "3906780"   "4140300"   "4145917"   "4235095"   "4240287"   "4383624"   "4398948"   "4436976"   "4475401"   "4538451"   "4563895"   "4565088"   "4583717"   "4607520"   "4635832"   "4646273"   "4870037"   "4973386"   "5019159"   "5022266"   "5028033"   "5042700"   "5083452"   "5203909"   "5251469"   "5633462").PN. OR ("6539805"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/30 17:03
S1	23	((("4905897") or ("4328025") or ("4823268") or ("5134961") or ("5442552") or ("5544813") or ("5653389") or ("5704546") or ("5763873") or ("5809440") or ("5833144") or ("5841035") or ("5861556") or ("5881919") or ("5908161") or ("5967066") or ("6003383") or ("6053053") or ("6170338") or ("6260941") or ("6596996") or ("6689338") or ("5389781"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/12/27 10:45
S2	811013	vibration\$6 or acoustic\$4 or sonic\$4 or sound\$4 or ultrasonic\$4 or ultrasound\$4 or supersonic\$4 or supersound\$4 or megasonic\$4 or megasound\$4 or microsonic\$4 or microsound\$4 or macrosonic\$4 or macrosound\$4 or infrasonic\$4 or infrasound\$4	US-PGPUB; USPAT	OR	ON	2006/12/27 10:53
S3	2264007	nozzle or flow or flowing	US-PGPUB; USPAT	OR	ON	2006/12/27 11:19
S4	60801	S2 with S3	US-PGPUB; USPAT	OR	ON	2006/12/27 10:54
S5	379470	(flow near3 rate) or (spray near3 pattern)	US-PGPUB; USPAT	OR	ON	2006/12/27 10:55
S6	8513	S4 same S5	US-PGPUB; USPAT	OR	ON	2006/12/27 10:56
S7	30903	vibrat\$9 with S3	US-PGPUB; USPAT	OR	ON	2006/12/27 11:19

## EAST Search History

S8	3616	S7 same S5	US-PGPUB; USPAT	OR	ON	2006/12/27 11:19
S9	744	S8 and "73"\$.ccls.	US-PGPUB; USPAT	OR	ON	2006/12/27 10:57
S10	656902	nozzle or spray or gun	US-PGPUB; USPAT	OR	ON	2006/12/27 11:19
S11	9148	vibrat\$9 with S10	US-PGPUB; USPAT	OR	ON	2006/12/27 11:19
S12	374	S11 same S5	US-PGPUB; USPAT	OR	ON	2006/12/27 14:35
S13	379470	(flow near3 rate) or (spray near3 pattern)	US-PGPUB; USPAT	OR	ON	2006/12/27 14:36
S14	656902	nozzle or spray or gun	US-PGPUB; USPAT	OR	ON	2006/12/27 14:36
S15	9148	vibrat\$9 with S14	US-PGPUB; USPAT	OR	ON	2006/12/27 15:13
S16	374	S15 same S13	US-PGPUB; USPAT	OR	ON	2006/12/27 14:36
S17	122	S16 same (frequency or duty or cycle or waveform or wave)	US-PGPUB; USPAT	OR	ON	2006/12/27 14:55
S18	9	("4884457"   "4905897"   "4989158"   "5031466").PN. OR ("5218871").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/27 14:50
S19	2264007	nozzle or flow or flowing	US-PGPUB; USPAT	OR	ON	2006/12/27 14:55
S20	30903	vibrat\$9 with S19	US-PGPUB; USPAT	OR	ON	2006/12/27 15:18
S21	3616	S20 same S13	US-PGPUB; USPAT	OR	ON	2006/12/27 14:55
S22	1160	S21 same (frequency or duty or cycle or waveform or wave or spectrum)	US-PGPUB; USPAT	OR	ON	2006/12/27 15:12
S23	73923	(frequency or power) near5 (spectrum or spectra)	US-PGPUB; USPAT	OR	ON	2006/12/27 15:12
S24	255	S23 same S14	US-PGPUB; USPAT	OR	ON	2006/12/27 15:13
S25	37	(vibrat\$9 or acceler\$8) same S24	US-PGPUB; USPAT	OR	ON	2006/12/27 15:13
S26	11	("3012848"   "3553636"   "4285241"   "4824016"   "4877488"   "4973386"   "4993264"   "5022266"   "5022268").PN. OR ("5974887").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/27 15:14
S27	403	vibrat\$9 same slug	US-PGPUB; USPAT	OR	ON	2006/12/27 15:18

## EAST Search History

S28	183	vibrat\$9 with slug	US-PGPUB; USPAT	OR	ON	2006/12/27 15:25
S29	2710	vibrat\$9 with plug	US-PGPUB; USPAT	OR	ON	2006/12/27 15:25
S30	6	S29 same S23	US-PGPUB; USPAT	OR	ON	2006/12/27 15:25
S31	31	("4884457"   "4905897"   "4989158"   "5031466").PN. OR ("5207107"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/27 15:27
S32	811013	vibration\$6 or acoustic\$4 or sonic\$4 or sound\$4 or ultrasonic\$4 or ultrasound\$4 or supersonic\$4 or supersound\$4 or megasonic\$4 or megasound\$4 or microsonic\$4 or microsound\$4 or macrosonic\$4 or macrosound\$4 or infrasonic\$4 or infrasound\$4	US-PGPUB; USPAT	OR	ON	2006/12/27 15:28
S33	18	S32 same (liquid near5 metal) same (plug or slug)	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/27 15:30
S34	812323	vibration\$6 or acoustic\$4 or sonic\$4 or sound\$4 or ultrasonic\$4 or ultrasound\$4 or supersonic\$4 or supersound\$4 or megasonic\$4 or megasound\$4 or microsonic\$4 or microsound\$4 or macrosonic\$4 or macrosound\$4 or infrasonic\$4 or infrasound\$4	US-PGPUB; USPAT	OR	ON	2006/12/30 13:43
S35	470	S34 same (plug or slug) same nozzle	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/30 16:43